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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,406	12/21/2001	Shunpei Yamazaki	SEL 297	2501
7590 04/27/2009 COOK, ALEX, McFARRON, MANZO, CUMMINGS & MEHLER, LTD. SUITE 2850 200 WEST ADAMS STREET CHICAGO, IL 60606				
EXAMINER				
PIZIALI, JEFFREY J				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Office Action Summary****Application No.**

10/026,406

**Applicant(s)**

YAMAZAKI ET AL.

**Examiner**

Jeff Piziali

**Art Unit**

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-4, 7-18, 20, 25, 26, 31-62 and 65-67 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 2-4, 7-18, 20, 25, 26, 31-62 and 65-67 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 December 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-894)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

#### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### ***Drawings***

2. The drawings have not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the figures.

#### ***Specification***

3. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

#### ***Election/Restrictions***

4. *Applicant's election of Species 1 (claims 2-4, 7-18, 20, 25, 26, 31-62, and 65-67) in the reply filed on 19 January 2009 is acknowledged and appreciated.*

Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

5. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 2-4, 20, 25, 26, 31-36, and 65-67**, drawn to a  
a light emitting device (*claims 2, 31, 32, 65, and 66*),  
a light emitting device (*claims 3, 33, and 34*),  
a light emitting device (*claims 4, 35, and 36*), and  
a liquid crystal display device (*claims 20, 25, 26, and 67*),  
classified in class 313, subclass 483 (*e.g., products having luminescent material producing radiant energy*).
- II. Claims 7-18 and 37-62**, drawn to a  
a method of driving a light emitting device (*claims 7, 15-18, and 37*),  
a method of driving a light emitting device (*claims 8 and 38-42*),  
a method of driving a light emitting device (*claims 9, 10, and 43-47*),  
a method of driving a light emitting device (*claims 11 and 48-52*),  
a method of driving a light emitting device (*claims 12 and 53-57*), and  
a method of driving a light emitting device (*claims 13, 14, and 58-62*),  
classified in class 345, subclass 214 (*e.g., methods of controlling the condition of display elements*).

The inventions are distinct, each from the other because of the following reasons:

6. Inventions I and II are related as product and process of use.

The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h).

(1) In the instant case, the process for using the product as claimed (*in claims 7-18 and 37-62*) can be practiced with another materially different product (*than that of claims 2-4, 20, 25, 26, 31-36, and 65-67*).

For example, the process as claimed (*in claims 7, 15-18, and 37*) can be practiced with another materially different product (*than that of claims 2-4, 20, 25, 26, 31-36, and 65-67*) not including at least:

***"writing each bit of the n bit digital video signals, which have been written in each of the n first memories, in each of the n second memories at once,"*** as claimed in independent claim 7 (*lines 12-13*);

***"starting an output of n counter signals from the counter circuit in response to a reset signal,"*** as claimed in independent claim 7 (*lines 16-17*); and

***"wherein the light emitting element emits a light only during a period that starts with the start of the output of the n counter signals and ends as a plurality of first information of each bit of the n bit digital video signals inputted to the display signal generating portion matches a plurality of second information of each of the n counter signals,"*** as claimed in independent claim 7 (*lines 19-23*).

For example, the process as claimed (*in claims 8 and 38-42*) can be practiced with another materially different product (*than that of claims 2-4, 20, 25, 26, 31-36, and 65-67*) not including at least:

*"turning on the n second switching thin film transistors at once to write each bit of the n bit digital video signals written in each of the n first memories in each of the n second memories at once,"* as claimed in independent claim 8 (*lines 14-16*);

*"starting an output of n counter signals from the counter circuit in response to a reset signal,"* as claimed in independent claim 8 (*lines 19-20*); and

*"wherein the light emitting element emits a light only during a period that starts with the start of the output of the n counter signals and ends as a plurality of first information of each bit of the n bit digital video signals inputted to the display signal generating portion matches a plurality of second information of each of the n counter signals,"* as claimed in independent claim 8 (*lines 22-26*).

For example, the process as claimed (*in claims 9, 10, and 43-47*) can be practiced with another materially different product (*than that of claims 2-4, 20, 25, 26, 31-36, and 65-67*) not including at least:

*"turning on the n second switching thin film transistors at once to write each bit of the n bit digital video signals written in each of the n first memories in each of the n second memories at once,"* as claimed in independent claim 9 (*lines 15-17*);

*"starting an output of n counter signals from the counter circuit in response to a reset signal,"* as claimed in independent claim 9 (*lines 20-21*); and

*"wherein the current controlling thin film transistor is turned on by a display signal outputted from the display signal generating portion only during a period that starts with the start of the output of the n counter signals and ends as a plurality of first information of each bit of the n bit digital video signals inputted to the display signal generating portion matches a plurality of second information of each of the n counter signals,"* as claimed in independent claim 9 (*lines 23-27*).



For example, the process as claimed (*in claims 11 and 48-52*) can be practiced with another materially different product (*than that of claims 2-4, 20, 25, 26, 31-36, and 65-67*) not including at least:

*"writing each bit of the n bit digital video signals written in each of the n first memories in each of the n second memories at once,"* as claimed in independent claim 11 (*lines 12-13*);

*"starting an output of n counter signals from the counter circuit in response to a reset signal,"* as claimed in independent claim 11 (*lines 16-17*); and

*"a second function of making the light emitting element emit a light only during a period that starts with the start of the output of the n counter signals and ends as the plurality of the first information of each bit of the n bit digital video signals inputted to the display signal generating portion matches the plurality of the second information of each of the n counter signals,"* as claimed in independent claim 11 (*lines 25-29*).

For example, the process as claimed (*in claims 12 and 53-57*) can be practiced with another materially different product (*than that of claims 2-4, 20, 25, 26, 31-36, and 65-67*) not including at least:

*"turning on the n second switching thin film transistors at once to write each bit of the n bit digital video signals written in each of the n first memories in each of the n second memories at once,"* as claimed in independent claim 12 (*lines 14-16*);

*"starting an output of n counter signals from the counter circuit in response to a reset signal,"* as claimed in independent claim 12 (*lines 19-20*); and

*"a second function of making the light emitting element emit a light only during a period that starts with the start of the output of the n counter signals and ends as the plurality of the first information of each bit of the n bit digital video signals inputted to the display signal generating portion matches the plurality of the second information of each of the n counter signals,"* as claimed in independent claim 12 (*lines 28-32*).

For example, the process as claimed (*in claims 13, 14, and 58-62*) can be practiced with another materially different product (*than that of claims 2-4, 20, 25, 26, 31-36, and 65-67*) not including at least:

*"turning on the n second switching thin film transistors at once to write each bit of the n bit digital video signals written in each of the n first memories in each of the n second memories at once,"* as claimed in independent claim 13 (*lines 15-17*);

*"starting an output of n counter signals from the counter circuit in response to a reset signal,"* as claimed in independent claim 13 (*lines 20-21*); and

*"a second function of turning on the current controlling thin film transistor only during a period that starts with the start of the output of the n counter signals and ends as the plurality of the first information of each bit of the n bit digital video signals inputted to the display signal generating portion matches the plurality of the second information of each of the n counter signals,"* as claimed in independent claim 13 (*lines 29-33*).

(2) In the instant case, the product as claimed (*in claims 2-4, 20, 25, 26, 31-36, and 65-67*) can be used in a materially different process of using that product (*than that of claims 7-18 and 37-62*).

For example, the product as claimed (*in claims 2, 31, 32, 65, and 66*) can be used in a materially different process of using that product (*than that of claims 7-18 and 37-62*) without at least:

*"gate signal lines,"* as claimed in independent claim 2 (*line 8*);

*"a latch signal line,"* as claimed in independent claim 2 (*line 9*);

*"means for determining a length of a period in which the light emitting element emits a light in accordance with a plurality of image information of digital video signals stored in each of the n second memories,"* as claimed in independent claim 2 (*lines 10-12*);

*"wherein the period turn up successively in one frame period,"* as claimed in independent claim 2 (*line 17*);

*"wherein the one frame period includes the period and a writing period,"* as claimed in independent claim 2 (*line 18*); and

*"wherein a gate electrode of each of the n first thin film transistors is connected to each of the gate signal lines and a gate electrode of each of the n second thin film transistors is connected to the latch signal line,"* as claimed in independent claim 2 (*lines 19-21*).

For example, the product as claimed (*in claims 3, 33, and 34*) can be used in a materially different process of using that product (*than that of claims 7-18 and 37-62*) without at least:

***"a thin film transistor for controlling a current provided to the light emitting element,"***  
as claimed in independent claim 3 (*lines 4-5*).

For example, the product as claimed (*in claims 4, 35, and 36*) can be used in a materially different process of using that product (*than that of claims 7-18 and 37-62*) without at least:

***"a thin film transistor for controlling a current provided to the light emitting element,"***  
as claimed in independent claim 4 (*lines 4-5*).

For example, the product as claimed (*in claims 20, 25, 26, and 67*) can be used in a materially different process of using that product (*than that of claims 7-18 and 37-62*) without at least:

*"a liquid crystal display device comprising: at least a pixel comprising: a liquid crystal cell,"* as claimed in independent claim 20 (*lines 1-3*);

*"gate signal lines,"* as claimed in independent claim 20 (*line 8*);

*"means for determining a length of a period in which the liquid crystal cell is turned on in accordance with a plurality of image information of digital video signals stored in each of the n second memories,"* as claimed in independent claim 20 (*lines 9-11*);

*"wherein the period turn up successively in one frame period,"* as claimed in independent claim 20 (*line 16*);

*"wherein the one frame period includes the period and a writing period,"* as claimed in independent claim 20 (*line 17*; and

*"wherein a gate electrode of each of the n first thin film transistors is connected to each of the gate signal lines and a gate electrode of each of the n second thin film transistors is connected to a latch signal line,"* as claimed in independent claim 20 (*lines 18-20*).

7. Restriction for examination purposes as indicated is proper because all these inventions listed in this action are independent or distinct for the reasons given above and there would be a serious search and examination burden if restriction were not required because one or more of the following reasons apply:

- (a) the inventions have acquired a separate status in the art in view of their different classification;
- (b) the inventions have acquired a separate status in the art due to their recognized divergent subject matter;
- (c) the inventions require a different field of search (for example, searching different classes/subclasses or electronic resources, or employing different search queries);
- (d) the prior art applicable to one invention would not likely be applicable to another invention;
- (e) the inventions are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

**Applicant is advised that the reply to this requirement to be complete must include (i) an election of an invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.**

The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected invention.

If claims are added after the election, applicant must indicate which of these claims are readable upon the elected invention.

Should applicant traverse on the ground that the inventions are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

8. The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so**



**may result in a loss of the right to rejoinder.** Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

9. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Piziali whose telephone number is (571) 272-7678. The examiner can normally be reached on Monday - Friday (6:30AM - 3PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chanh Nguyen can be reached on (571) 272-7772. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeff Piziali/  
Primary Examiner, Art Unit 2629  
21 April 2009